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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/571,079

11/02/2006

Gabriel Dambaugh

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EXAMINER

JOYCE, WILLIAM C

ART UNIT

PAPER NUMBER

3656

NOTIFICATION DATE

DELIVERY MODE

10/06/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

info@lmiplaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/571,079	<b>Applicant(s)</b> DAMBAUGH ET AL.	
	<b>Examiner</b> William C. Joyce	<b>Art Unit</b> 3656	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.                                                            | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

This is the First Office Action in response to the above identified patent application filed on November 2, 2009.

#### ***Drawings***

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

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disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it should be limited to a single paragraph and the implied phrases "The invention relates" (line 1 of paragraph 1) and "The invention is distinguished" (line 1 of paragraph 2). Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: References to specific claim numbers (such as page 4, line 10, and elsewhere) must be deleted because the claim numbering may change during prosecution. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art of Figure 1 (AAPA) in view of Ramey (2002/0160842).

Figure 1 of AAPA illustrates a bearing arrangement for absorbing axial loads, comprising a plurality of axial roller bearings arranged one behind the other and

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each having a housing plate, a shaft plate and rolling body sets arranged between these runner plates, the shaft plates and the housing plates being supported axially by means of spacer rings arranged between them in each case, characterized in that the housing plates and the shaft plates have a constant axial thickness over their entire radial extent in the region of the rolling body sets.

Figure 1 does not show at least one of the shaft plates is provided at its inner circumference with an annular clearance which is inwardly open in the radial direction. The prior art to Ramey teaches an inner race (44) having a recess for accommodating a retaining ring (50) for joining the race to a shaft. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bearing of applicant's Figure 1 with a shaft race having a recess for accommodating a retaining ring (50), as taught by Ramey, motivation being to provide easy and inexpensive means for connecting the shaft race to a shaft.

With respect to claims 2 and 3, the terms "upper" and "lower" are relative terms that depend on the orientation of the bearing device. Further, one in the art would recognize that the inner race recess can be formed on either the top or bottom shaft race of AAPA depending on its particular application to facilitate in the assembly of the device.

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With respect to claim 6, Official Notice is taken with respect to the ring having a slot because it was notoriously known in the art to form a retaining ring, such as a snap ring, with a slot.

7. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art of Figure 1 (AAPA) in view of Furukoshi et al. (USP 6,280,095).

As described above, Figure 1 of AAPA illustrates a bearing arrangement for absorbing axial loads. However, Figure 1 or AAPA does not show at least one of the shaft plates is provided at its inner circumference with an annular clearance which is inwardly open in the radial direction. The prior art to Furukoshi et al. teaches an inner race having a recess for accommodating a sealing ring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shaft race of the bearing illustrated in Figure 1 by applicant with a recess for accommodating a sealing member, as taught by Furukoshi et al., motivation being to prevent contaminants/ and or fluids from entering between the shaft race and the shaft.

With respect to claims 2 and 3, the terms "upper" and "lower" are considered relative terms that depend on the orientation of the bearing device. Further, one in the art would recognize that the inner race recess can be formed on either the

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top or bottom shaft race of AAPA depending on its particular application to facilitate in the assembly of the device.

8. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art of Figure 1 (AAPA) in view Nakamura et al. (USP 4,545,627).

As described above, Figure 1 of AAPA illustrates a bearing arrangement for absorbing axial loads. However, Figure 1 or AAPA does not show at least one of the shaft plates being provided at its inner circumference with an annular clearance which is inwardly open in the radial direction. The prior art to Nakamura et al. teaches an inner race having a recess for accommodating a ring member. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shaft race of the bearing illustrated in Figure 1 by applicant with a recess for accommodating a ring member, as taught by Nakamura et al., motivation being to prevent relative movement between the shaft race and the shaft.

With respect to claims 2 and 3, the terms "upper" and "lower" are considered relative terms that depend on the orientation of the bearing device. Further, one in the art would recognize that the inner race recess can be formed on either the top or bottom shaft race of AAPA depending on its particular application to facilitate in the assembly of the device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Joyce/  
Primary Examiner, Art Unit 3656